



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,501	01/10/2006	Ronald W Wood	176/61373	5801
7590 Michael L. Goldman Nixon Peabody Clinton Square PO Box 31051 Rochester, NY 14603-1051				
EXAMINER				
KWON, BRIAN YONG S				
ART UNIT		PAPER NUMBER		
1614				
MAIL DATE		DELIVERY MODE		
07/16/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/542,501

**Applicant(s)**

WOOD, RONALD W

**Examiner**

Brian-Yong S. Kwon

**Art Unit**

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 7-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## DETAILED ACTION

### *Status of Application*

1. Acknowledgement is made of applicant's amendment/remarks on 06/28/2010. By the amendment, claims 1, 20, 22 and 26 have been amended.

Applicant's arguments with respect to claims 1-6 and 22-27 have been considered but are moot in view of the new ground(s) of rejection. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the **finality** of that action is **withdrawn**.

2. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of actions

3. Claims 1-27 are currently pending for prosecution on the merits. Claims 7-21 are withdrawn from further consideration by examiner as being drawn to the non-elected invention.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 1-6 and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bannister et al. (WO 02/45711 A1), and further in view of Matsuura et al. (US 6171298).

Bannister teaches a use of anti-muscarinic agent (i.e., tiotropium which is also commonly known as tiotropium bromide or Ba 679BR) in combination with calcium channel blocker for the treatment of a muscle tone disorder or a proliferative, inflammatory or secretory condition including urinary incontinence, preferably in oral route (see abstract and the disclosure of WO'711, especially page 4, lines 1-6 and 11-16; page 5, lines 19-23; claims 12-13 and 17).

Matsuura is being provided as a supplemental reference to demonstrate the state of art knowledge at the time of the invention was made that the intravesical delivery of the pharmaceutical agents including antimuscarinic and anticholinergic agent was well known and that the intravesical delivery provides advantage in treating bladder disease such as urinary incontinence including urge incontinence because the adverse effects associated with systemic

administration (e.g., oral, intravenous, intramuscular or transdermal administration) of antimuscarinic or anticholinergic agent could be minimized by administration of the drug via intravesical instillation or infusion (column 1, lines 16-26, column 2, lines 30-34 and column 20, lines 28-37 of US'298). Matsuura also teaches that the additive (e.g., heparin and pentosanpolysulfate) is useful in formulating solution or suspension which is intended for intravesical delivery because such additive or coating material for the intravesical device can reduce or even prevent encrustation (column 2, lines 36-45, column 19, lines 59-61 and column 21, lines 7-11 of US'298).

The teaching of Bannister mainly differs from the instant invention in the delivery of said composition intravesically. Furthermore, the teaching of Bannister differs from the instant invention in (ii) the formulation of said composition to have "a prolonged duration of action", namely at least about three weeks, (iii) the incorporation of an additive (e.g., pentosan polysulfate, heparin, etc...) and (iv) the subject having condition selected from the group consisting of "urge incontinence, cystitis, bladder dysfunction of multiple sclerosis, benign prostate hyperplasia, myelomeningocele, spinal cord injury, dementia...and inability to tolerate systemic effects of antimuscarinic medications". To incorporate such teaching into the teaching Bannister, it would have been obvious in view of Matsuura who teaches the advantage of delivering pharmaceutical agent that is useful for the treatment of bladder disease such as urinary incontinence or urge incontinence via intravesical instillation or infusion, which will avoid the side effects associated with the systemic administration.

One having ordinary skill in the art at the time of the invention was made would have known that the systemic administration of the drugs that is useful for the treatment of bladder disease such as urinary incontinence or urge incontinence causes the undesirable adverse effects to most of patients. Thus, one would have been motivated to make such modification to increase the efficacy (e.g. solubility, compatibility, etc) in treating patient suffering from urinary incontinence or urge incontinence and extend the usage of antimuscarinic agent such as tiotropium containing composition by making the formulation having prolonged duration of action, which is intended for intravesical delivery, to meet patient's preference and needs where the adverse effects associated with system administration of antimuscarinic agent could be minimized.

Alternatively, since there are general references (see also references cited in the instant and the previous PTO-892 forms) indicating that pharmaceuticals generally may be delivered intravesically, as well as disclosing benefits to be achieved by intravesical versus other modes of administration, e.g., systemic. Therefore, there exist general art accepted motivations for formulating drugs for intravesical administration. Although the instant claims use the different names for the said ingredients than those taught in the cited references, these references are particularly pertinent and relevant because all the claimed species and their roles are well taught in the cited reference. Thus, one would have been motivated to combine these references and make the modification because they are drawn to same technical fields (constituted with same ingredients and share common utilities, and pertinent to the problem which applicant concerns about. MPEP 2141.01(a).

Since the interpretation of the instant transition term "comprising" allows for the inclusion of unspecified ingredients even in major amounts or additional steps, the references in combination make obvious the instant invention.

### Conclusion

5. No Claim is allowed.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Kwon whose telephone number is (571) 272-0581. The examiner can normally be reached Tuesday through Friday from 9:00 am to 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached on (571) 272-0718. The fax number for this Group is (571) 273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications may be obtained from Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov> Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Brian-Yong S Kwon/  
Primary Examiner, Art Unit 1614

